

L1 ANSWER 1 OF 2 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 AN 2002-657511 [70] WPIDS  
 DNC C2002-184498  
 TI New inactivated combination bovine rotavirus and coronavirus vaccine,  
 useful for immunizing and protecting bovine animals from diseases caused  
 by these infections, such as neonatal calf diarrhea or calf enteritis.  
 DC B04 C06 D16  
 IN DYKSTRA, S; **KNAPE, K**; TINANT, M; LYNCH, K  
 PA (DYKS-I) DYKSTRA S; (KNAP-I) KNAPE K; (TINA-I) TINANT M; (GRAN-N) GRAND  
 LAB INC  
 CYC 100  
 PI WO 2002062382 A1 20020815 (200270)\* EN 27p A61K039-15  
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
 NL OA PT SD SE SL SZ TR TZ UG ZM ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT  
 RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
 US 2002155128 A1 20021024 (200273) A61K039-295  
 ADT WO 2002062382 A1 WO 2002-US3200 20020204; US 2002155128 A1 US 2001-776787  
 20010204  
 PRAI US 2001-776787 20010204  
 IC ICM A61K039-15; A61K039-295  
 ICS A61K039-08; A61K039-108; A61K039-215

L1 ANSWER 2 OF 2 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 AN 1990-000299 [01] WPIDS  
 DNN N1990-000156  
 TI Conveyor belt system for lignite installations - has control unit for  
 stopping and starting conveyor.  
 DC Q35  
 IN KALUSNIAK, B; **KNAPE, K**; PFAFFE, S  
 PA (WELZ-N) VEB BRAUNK WELZOW  
 CYC 1  
 PI DD 270281 A 19890726 (199001)\*  
 ADT DD 270281 A DD 1988-313877 19880322  
 PRAI DD 1988-313877 19880322  
 IC B65G043-10

=> s (bovine (2w) rotavirus)  
 L2 636 (BOVINE (2W) ROTAVIRUS)  
 => s (bovine (2w) coronavirus)  
 L3 407 (BOVINE (2W) CORONAVIRUS)  
 => s l2 and l3  
 L4 63 L2 AND L3  
 => s l2 (P) l3  
 L5 52 L2 (P) L3  
 => s cody  
 L6 498 CODY  
 => s mebus  
 L7 72 MEBUS  
 => s l6 and l7  
 L8 2 L6 AND L7  
 => d l8 1-2 ab bib

L8 ANSWER 1 OF 2 USPATFULL on STN

AB Inactivated scours vaccines for immunization and protection of bovine animals from disease caused by infection with bovine rotavirus and bovine coronavirus, which comprise an effective amount of at least one inactivated viral strain are described. Polyvalent inactivated vaccines further comprising an effective amount of an antigenic component which is protective against one or more additional pathogenic organisms or viruses are also disclosed. Said vaccines are prepared from one or more strains of rota- and coronavirus, C. perfringens Type C bacteria and E. coli bacteria, and combinations thereof. Preferably, a polyvalent inactivated vaccine is provided for parenteral administration. Passive immunity is achieved in neonatal calves via immunization of pregnant cows prior to birth.

AN 2002:279697 USPATFULL

TI Inactivated bovine scours vaccines, processes and method of preventing bovine scours

IN Knape, Kelly, Larch Wood, IA, UNITED STATES  
Dykstra, Stephanie, Parker, SD, UNITED STATES  
Tinant, Mary, Brandon, SD, UNITED STATES

PI US 2002155128 A1 20021024

AI US 2001-776787 A1 20010204 (9)

DT Utility

FS APPLICATION

LREP DAN CLEVELAND, LATHROP & GAGE L.C., 4845 PEARL EAST CIRCLE, SUITE 300, BOULDEER, CO, 80301

CLMN Number of Claims: 48

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 936

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 2 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

AB WO 200262382 A UPAB: 20021031

NOVELTY - An inactivated combination bovine rotavirus and coronavirus vaccine capable of inducing immunity in bovine animals without serious side effects, comprising a vaccinal amount of several bovine rotavirus strains, at least one bovine coronavirus strain, and/or at least one vaccinal bacteria comprising a vaccinal amount of several bacterin strains, and an adjuvant, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) vaccinating bovine animals, comprising administering parenterally to the animals the inactivated combination vaccine mentioned above; and

(2) inducing scours immunity in neonatal bovine animals without serious side effect, comprising administering the above vaccine to pregnant cows prior to calving.

ACTIVITY - Immunomodulator; Antiinflammatory; Antibacterial; Virucide; Antidiarrheic.

No biological data given.

MECHANISM OF ACTION - Vaccine.

USE - The vaccine is useful for immunizing and protecting bovine animals from diseases caused by infections with bovine rotavirus, coronavirus, E. coli or C. perfringens, such as neonatal calf diarrhea, calf enteritis, or winter dysentery in adult cattle.

Dwg.0/0

AN 2002-657511 [70] WPIDS

DNC C2002-184498

TI New inactivated combination bovine rotavirus and coronavirus vaccine, useful for immunizing and protecting bovine animals from diseases caused by these infections, such as neonatal calf diarrhea or calf enteritis.

DC B04 C06 D16

IN DYKSTRA, S; KNAPE, K; TINANT, M; LYNCH, K

PA (DYKS-I) DYKSTRA S; (KNAP-I) KNAPE K; (TINA-I) TINANT M; (GRAN-N) GRAND

LAB INC

CYC 100

bovine viral diarrhoea virus (BVDV) and parainfluenza-3 (PI-3) were investigated in a total of 315 fetal serum samples. Conventional techniques were used: indirect immunofluorescence (FMDV, BHV-1, BVDV and BCV), radial immunodiffusion (BLV), ELISA (BRV) and haemagglutination inhibition (PI-3). Antibodies against BHV-1, BVDV and PI-3 were detected in samples from fetuses in the second and third trimester of gestation, with a prevalence of 1.21 per cent (two of 165), 2.03 per cent (four of 197) and 5.08 per cent (nine of 177), respectively. Either antibodies or non-antibody factors able to bind to BRV and BCV antigens were detected with a prevalence of 2.44 per cent (five of 205) and 4.54 per cent (five of 110), respectively. In addition, 14.68 per cent of non-specific inhibitors of PI-3 mediated haemagglutination were found. No seropositives against FMDV and BLV were detected.

L5 ANSWER 9 OF 52 MEDLINE on STN  
 AN 92171316 MEDLINE  
 DN 92171316 PubMed ID: 1371656  
 TI Development of monoclonal antibody ELISA for simultaneous detection of **bovine coronavirus**, **rotavirus** serogroup A, and *Escherichia coli* K99 antigen in feces of calves.  
 AU Thorns C J; Bell M M; Chasey D; Chesham J; Roeder P L  
 CS Ministry of Agriculture, Fisheries, and Food, Central Veterinary Laboratory, Weybridge, Surrey, United Kingdom.  
 SO AMERICAN JOURNAL OF VETERINARY RESEARCH, (1992 Jan) 53 (1) 36-43.  
 Journal code: 0375011. ISSN: 0002-9645.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199204  
 ED Entered STN: 19920417  
 Last Updated on STN: 19960129  
 Entered Medline: 19920402  
 AB A rapid ELISA was developed for simultaneous detection of **bovine coronavirus** (BCV), **rotavirus** (RV) serogroup A, and *Escherichia coli* K99 antigen in feces of calves. A mixture of 3 monoclonal antibodies specific for BCV, RV, or K99 was used successfully to capture the antigens; the same antibodies labeled with peroxidase were used to detect BCV, RV, or K99. The triple ELISA was compared with standard reference diagnostic methods by examining feces from experimentally and naturally infected and healthy calves. All the components of the test were highly specific (greater than 90%) and sensitive (BCV, 77%; K99, 93%; RV, 100%) when used in a format requiring short incubation steps at 20 C and visual recording of results.

L5 ANSWER 10 OF 52 MEDLINE on STN  
 AN 90176034 MEDLINE  
 DN 90176034 PubMed ID: 2560579  
 TI [Research on antibodies against BHV-1, BHV-2, BHV-4, BVD-MD virus, bovine adenovirus A and B, rotavirus and coronavirus in cattle in western Zaire: complementary results].  
 Recherche des anticorps dirigés contre les BHV-1, BHV-2, BHV-4, le virus BVD-MD, les adenovirus A et B, le rotavirus et le coronavirus bovins chez des bovins de l'Ouest du Zaire: résultats complémentaires.  
 AU Eyanga E; Jetteur P; Thiry E; Wellemans G; Dubuisson J; Van Opdenbosch E; Makumbu S; Pastoret P P  
 SO REVUE D'ELEVAGE ET DE MEDECINE VETERINAIRE DES PAYS TROPICAUX, (1989) 42 (2) 155-61.  
 Journal code: 2984776R. ISSN: 0035-1865.  
 CY France  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA French  
 FS Priority Journals  
 EM 199004

ED Entered STN: 19900601  
 Last Updated on STN: 19980206  
 Entered Medline: 19900403

AB Two-hundred bovine sera from western Zaire were screened for antibodies to 8 viruses: BHV-1, BHV-2, BHV-4, BVD-MD virus, bovine adenovirus A and B, **bovine rotavirus** and **bovine coronavirus**. Positive sera were found to all these viruses. For animals whose origin was undoubted, the main features were the high prevalence of infections by rotavirus and BHV-4 and the low prevalence of infections by coronavirus and BVD-MD virus.

L5 ANSWER 11 OF 52 MEDLINE on STN  
 AN 88337955 MEDLINE  
 DN 88337955 PubMed ID: 2844041  
 TI Incidence of diarrhoea and of rotavirus- and coronavirus-shedding in calves, whose dams had been vaccinated with an experimental oil-adjuvanted vaccine containing **bovine rotavirus** and **bovine coronavirus**.  
 AU Mostl K; Burki F  
 SO ZENTRALBLATT FUR VETERINARMEDIZIN. REIHE B, (1988 Apr) 35 (3) 186-96.  
 Journal code: 0331325. ISSN: 0514-7166.  
 CY GERMANY, WEST: Germany, Federal Republic of  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 198810  
 ED Entered STN: 19900308  
 Last Updated on STN: 20030218  
 Entered Medline: 19881017

=>

PI WO 2002062382 A1 20020815 (200270)\* EN 27p  
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
 NL OA PT SD SE SL SZ TR TZ UG ZM ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT  
 RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
 US 2002155128 A1 20021024 (200273)  
 ADT WO 2002062382 A1 WO 2002-US3200 20020204; US 2002155128 A1 US 2001-776787  
 20010204  
 PRAI US 2001-776787 20010204

=> s 15 and 16  
 L9 2 L5 AND L6

=> d 15 1-11 bib ab

L5 ANSWER 1 OF 52 MEDLINE on STN  
 AN 2002084732 MEDLINE  
 DN 21670011 PubMed ID: 11811688  
 TI Cross-protection studies between respiratory and calf diarrhea and winter  
 dysentery coronavirus strains in calves and RT-PCR and nested PCR for  
 their detection.  
 AU Cho K O; Hasoksuz M; Nielsen P R; Chang K O; Lathrop S; Saif L J  
 CS Department of Veterinary Preventive Medicine, Ohio Agricultural Research  
 and Development Center, The Ohio State University, Wooster 44691, USA.  
 SO ARCHIVES OF VIROLOGY, (2001 Dec) 146 (12) 2401-19.  
 Journal code: 7506870. ISSN: 0304-8608.  
 CY Austria  
 DT (EVALUATION STUDIES)  
 Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200202  
 ED Entered STN: 20020129  
 Last Updated on STN: 20020220  
 Entered Medline: 20020219  
 AB A 1-step RT-PCR assay, targeting a 730 bp fragment of the nucleocapsid (N)  
 gene of **bovine coronavirus** (BCV), and a nested PCR  
 assay, targeting a 407 bp fragment of the N gene, were developed to detect  
 BCV in nasal swab and fecal samples of calves experimentally exposed to  
 BCV. Both 1-step RT-PCR and nested PCR recognized cell culture passaged  
 isolates of 10 **bovine** respiratory **coronavirus** (BRCV),  
 5 calf diarrhea (CD) and 8 winter dysentery (WD) strains of BCV, but not  
 transmissible gastroenteritis coronavirus or **bovine**  
**rotavirus**. The sensitivity of the 1-step RT-PCR and nested PCR  
 was compared to that of an antigen-capture ELISA. The lowest detection  
 limit of the 1-step RT-PCR and nested PCR as determined by using tenfold  
 serial dilutions of the BRCV 255 and 440 strains in BCV negative nasal  
 swab suspensions from preexposure gnotobiotic calves was 2 x 10<sup>(4)</sup> and 2 x  
 10<sup>(2)</sup> TCID<sub>50</sub>/0.1 ml for each strain, respectively. The lowest detection  
 limit of the antigen-capture ELISA as determined by using the same  
 serially diluted samples was 1 x 10<sup>(6)</sup> TCID<sub>50</sub>/0.1 ml for each strain.  
 Therefore, the 1-step RT-PCR and nested PCR assays were 50 and 5000 times,  
 respectively more sensitive than the antigen-capture ELISA to detect BRCV  
 in nasal swab suspensions. To investigate in vivo cross-protection  
 between the BRCV and CD or WD strains of BCV and to detect nasal and fecal  
 shedding of BCV using the 1-step RT-PCR, nested PCR and antigen-capture  
 ELISA, 6 colostrum-deprived and two gnotobiotic calves were inoculated  
 with a BRCV, a CD or a WD strain of BCV and then challenged 3-4 weeks  
 later with either BRCV, CD or WD strains of BCV. All calves developed  
 diarrhea after inoculation and BCV antigen (ELISA) or RNA (RT-PCR) was  
 detected in the diarrheic fecal samples or the corresponding nasal swab

samples. In addition, low amounts of BCV were also detected only by nested PCR in the fecal and nasal swab samples before and after diarrhea. No respiratory clinical signs were observed during the entire experimental period, but elevated rectal temperatures were detected during diarrhea in the BCV-inoculated calves. All calves recovered from infection with the BRCV, CD, or WD strains of BCV were protected from BCV-associated diarrhea after challenge exposure with either a heterologous or homologous strain of BCV. However, all calves challenged with heterologous BCV strains showed subclinical BCV infection evident by detection of nasal and fecal shedding of BCV RNA detected only by nested PCR. Such results confirm field and experimental data documenting reinfection of the respiratory and enteric tracts of cattle, suggesting that, in closed herds, respiratory or enteric tract reinfections may constitute a source of BCV transmissible to cows (WD) or neonatal or feedlot calves. In addition, the present 1-step RT-PCR and nested PCR assays were highly sensitive to detect BCV in nasal swab and fecal specimens. Therefore, these assays should be useful to diagnose BCV infections in calves and adult cows.

L5 ANSWER 2 OF 52 MEDLINE on STN  
 AN 2000169432 MEDLINE  
 DN 20169432 PubMed ID: 10702506  
 TI Development, characterization, and diagnostic applications of monoclonal antibodies against bovine rotavirus.  
 AU Al-Yousif Y; Al-Majhdi F; Chard-Bergstrom C; Anderson J; Kapil S  
 CS Department of Diagnostic Medicine-Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, Kansas 66506, USA.  
 SO CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY, (2000 Mar) 7 (2) 288-92.  
 Journal code: 9421292. ISSN: 1071-412X.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200004  
 ED Entered STN: 20000512  
 Last Updated on STN: 20000512  
 Entered Medline: 20000428  
 AB Hybridomas secreting monoclonal antibodies (MAbs) against the Nebraska calf diarrhea strain of **bovine rotavirus** (BRV) were characterized. Indirect fluorescent-antibody assay, immunodot assay, and immunoprecipitation were used to select hybridomas that produced anti-BRV MAbs. Seven of the MAbs were shown by sodium dodecyl sulfate-polyacrylamide gel electrophoresis and Western blot assay to be reactive with the BRV outer capsid protein, VP7, which has a molecular mass of 37.5 kDa. None of the seven MAbs were reactive with canine rotavirus, **bovine coronavirus**, or uninfected Madin-Darby bovine kidney cells. Two clones, 8B4 (immunoglobulin G2a [IgG2a]) and 2B11 (IgG1), were found suitable for use in an antigen capture enzyme-linked immunosorbent assay for detecting BRV in bovine fecal samples. Both were subtype A specific (G6 subtype) but did not react with all isolates of BRV group A.

L5 ANSWER 3 OF 52 MEDLINE on STN  
 AN 1999067981 MEDLINE  
 DN 99067981 PubMed ID: 9850995  
 TI An in vitro study of theaflavins extracted from black tea to neutralize **bovine rotavirus** and **bovine coronavirus** infections.  
 AU Clark K J; Grant P G; Sarr A B; Belakere J R; Swaggerty C L; Phillips T D; Woode G N  
 CS Department of Veterinary Pathobiology, College of Veterinary Medicine, Texas A&M University, College Station 77843-4467, USA.  
 SO VETERINARY MICROBIOLOGY, (1998 Oct) 63 (2-4) 147-57.  
 Journal code: 7705469. ISSN: 0378-1135.  
 CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199902  
 ED Entered STN: 19990216  
 Last Updated on STN: 19990216  
 Entered Medline: 19990204

AB Crude theaflavin was extracted from black tea and then fractionated by HPLC into five components (initial peaks (IP), TF1, TF2A, TF2B, and TF3). The crude extract and the various fractions of theaflavin were collected and tested, individually and in combination, for antirotaviral activity. The mean effective concentration (EC50) was calculated and compared. Activity varied from the most active being the uncharacterized theaflavin-like initial peaks (IP) with an EC50 of 0.125 microgram/ml to the least active being theaflavin-3 monogallate (TF2A) with an EC50 of 251.39 micrograms/ml. The combination of TF1 + TF2A + TF2B + TF3 was more active than the sum of the activities of these four fractions individually, indicating synergism among the peaks. Only the crude extract was assayed for activity against coronavirus; the EC50 was 34.7 micrograms/ml.

L5 ANSWER 4 OF 52 MEDLINE on STN  
 AN 1999067980 MEDLINE  
 DN 99067980 PubMed ID: 9850994  
 TI In vitro studies on the use of clay, clay minerals and charcoal to adsorb **bovine rotavirus** and **bovine coronavirus**.  
 AU Clark K J; Sarr A B; Grant P G; Phillips T D; Woode G N  
 CS Department of Veterinary Pathobiology and Public Health, College of Veterinary Medicine, Texas A&M University, College Station 77845, USA.  
 SO VETERINARY MICROBIOLOGY, (1998 Oct) 63 (2-4) 137-46.  
 Journal code: 7705469. ISSN: 0378-1135.  
 CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199902  
 ED Entered STN: 19990216  
 Last Updated on STN: 19990216  
 Entered Medline: 19990204

AB Rotaviruses are the leading cause and coronaviruses are the major contributors of acute gastroenteritis in the young of various mammalian and avian species. Despite numerous trials and decades of research, vaccines have limited efficacy particularly for calves. As an alternative method of controlling infection, we have investigated broad spectrum antiviral agents that are not discriminatory among various viruses. This report involves testing a variety of adsorbent agents including charcoal, clay, and clay minerals to adsorb rotavirus and coronavirus in vitro. Results revealed that all the adsorbent agents had good to excellent capability of adsorbing rotavirus and excellent capability of adsorbing coronavirus. Percent adsorptions ranged from 78.74% to 99.89% for rotavirus and 99.99% for coronavirus; while sand (negative control) was < 0.01%. A high affinity binding was present as determined by a low percent desorption (0.06-3.09%). However, the adsorbent bound virus complex retained, and may have actually enhanced, infectivity.

L5 ANSWER 5 OF 52 MEDLINE on STN  
 AN 1998073983 MEDLINE  
 DN 98073983 PubMed ID: 9409518  
 TI Enhancement of passive immunity with maternal vaccine against newborn calf diarrhea.  
 AU Kohara J; Hirai T; Mori K; Ishizaki H; Tsunemitsu H  
 CS Shintoku Animal Husbandary Experiment Station, Hokkaido, Japan.  
 SO JOURNAL OF VETERINARY MEDICAL SCIENCE, (1997 Nov) 59 (11) 1023-5.

Journal code: 9105360. ISSN: 0916-7250.

CY Japan  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199802  
ED Entered STN: 19980217  
Last Updated on STN: 19980217  
Entered Medline: 19980204  
AB The effects of a maternal vaccine against newborn calf diarrhea associated with group A **bovine rotavirus** (BRV), **bovine coronavirus** (BCV), bovine parvovirus and K99 Escherichia coli (E. coli) were examined on a beef cow-calf herd. After vaccination, serum or colostrum antibody titers to BRV, BCV and E. coli K99 in the vaccinated cows were significantly higher than those in unvaccinated control cows. Serum antibody titers to BRV, BCV and E. coli K99 in calves from the vaccinated cows were also significantly higher than those in calves from the control cows for 3-4 weeks after birth. These results suggested that the immunization of cows with the maternal vaccine enhanced the passive immunity levels in calves against BRV, BCV and K99 E. coli.

L5 ANSWER 6 OF 52 MEDLINE on STN  
AN 96155804 MEDLINE  
DN 96155804 PubMed ID: 8580160  
TI Rotavirus shedding in feces of gnotobiotic calves orally inoculated with a commercial rotavirus-coronavirus vaccine.  
AU Theil K W; McCloskey C M  
CS Food Animal Health Research Program, Ohio Agricultural Research and Development Center, Ohio State University, Wooster 44691-4096, USA.  
SO JOURNAL OF VETERINARY DIAGNOSTIC INVESTIGATION, (1995 Oct) 7 (4) 427-32.  
Journal code: 9011490. ISSN: 1040-6387.

CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199603  
ED Entered STN: 19960327  
Last Updated on STN: 19960327  
Entered Medline: 19960315

AB The purpose of this study was to monitor by negative stain electron microscopy the shedding of rotavirus in the feces of gnotobiotic calves orally inoculated with a commercial modified live **bovine rotavirus-bovine coronavirus** vaccine. Negative stain electron microscopic examination detected vaccine rotavirus in only 1 of 41 daily fecal specimens collected from 3 gnotobiotic calves during the 2 weeks following oral inoculation with a US Department of Agriculture-licensed modified live **bovine rotavirus-bovine coronavirus** vaccine. In contrast, rotavirus was demonstrable by the same negative stain electron microscopic examination procedure in 17 of 19 fecal specimens collected from diarrheic gnotobiotic or colostrum-deprived calves during the first 8 days after inoculation with virulent **bovine rotavirus** field strains. Rotavirus was also detected by this procedure in 4 enzyme-linked immunosorbent assay positive fecal specimens collected from naturally-infected diarrheic dairy calves. These results suggest that fecal shedding of vaccine rotavirus demonstrable by electron microscopic examination is uncommon following oral inoculation of calves with the **bovine rotavirus-bovine coronavirus** vaccine.

L5 ANSWER 7 OF 52 MEDLINE on STN  
AN 95219766 MEDLINE  
DN 95219766 PubMed ID: 7704839  
TI A seroepidemiological study of the importance in cow-calf pairs of



respiratory and enteric viruses in beef operations from northwestern Quebec.

AU Ganaba R; Belanger D; Dea S; Bigras-Poulin M

CS Departement de pathologie et microbiologie, Faculte de Medecine Veterinaire, Universite de Montreal, Saint-Hyacinthe, Quebec.

SO CANADIAN JOURNAL OF VETERINARY RESEARCH, (1995 Jan) 59 (1) 26-33.

Journal code: 8607793. ISSN: 0830-9000.

CY Canada

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199505

ED Entered STN: 19950518

Last Updated on STN: 19990129

Entered Medline: 19950508

AB Serum antibody analyses for bovine herpesvirus type 1 (BHV-1), bovine viral diarrhoea virus (BVDV), bovine respiratory syncytial virus (BRSV), **bovine coronavirus** (BCV), and **bovine rotavirus** (BRV) were performed on 527 randomly selected cows, before calving, and on 407 three-week-old calves. In cows and calves, BCV and BRV were the most seroprevalent viruses (80% to 100% according to virus and vaccination status). Bovine respiratory syncytial virus was the least seroprevalent in the cows, independent of the vaccination status. In nonvaccinated cows the seroprevalence to BRSV was 36.7%, and 53.5% in cows vaccinated less than two weeks prior to collecting blood, and 67.6% in cows vaccinated two weeks or more prior to blood collection. In their calves, BHV-1 was the least seroprevalent, independent of the vaccination status. The serological status and antibody titers in calves were generally associated with those of the dam. The occurrence of respiratory diseases in the calves was associated with cow and calf serological profiles (BHV-1, BRSV and BCV in the nonvaccinated group, BHV-1, BVDV and BCV in the vaccinated group). The occurrence of diarrhoea was not associated with cow and calf serological profiles but was negatively associated with high level calf serum IgG in the nonvaccinated group (odds ratio = 0.73). **Bovine coronavirus** and BRV were shed by 1.4% and 4.9% of calves in the nonvaccinated group, and by 0% and 9.9% of calves in the vaccinated group, respectively. **Bovine rotavirus** shedding was associated with fecal diarrhoeic consistency at the moment of fecal sampling but not with previous occurrence of diarrhoea.

L5 ANSWER 8 OF 52 MEDLINE on STN

AN 94112365 MEDLINE

DN 94112365 PubMed ID: 8284507

TI Viral antibodies in bovine fetuses in Argentina.

AU Pinto G B; Hawkes P; Zabal O; Ulloa E; Lager I A; Weber E L; Schudel A A

CS Instituto de Virologia, Centro de Investigaciones en Ciencias Veterinarias, INTA-Castelar, Moron, Buenos Aires, Argentina.

SO RESEARCH IN VETERINARY SCIENCE, (1993 Nov) 55 (3) 385-8.

Journal code: 0401300. ISSN: 0034-5288.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199402

ED Entered STN: 19940228

Last Updated on STN: 19940228

Entered Medline: 19940217

AB In order to establish the prevalence of viral infections of the bovine fetus in Argentina, a serological survey for antibodies against viral agents currently affecting cattle in this country was conducted. Antibodies against foot-and-mouth disease virus (FMDV), bovine herpesvirus-1 (BHV-1), bovine leukaemia virus (BLV), **bovine rotavirus** (BRV), **bovine coronavirus** (BCV),